REMARKS

Claims 2-3, 5-6, 8-9, 11-12, 14-15, 17-18 and 23-28 were pending in the application. Claims 26-28 have been cancelled. Claims 2-3, 5-6, 8-9, 11-12, 14-15, 17-18 and 23-25 have been amended. The specification has been amended to correct informalities. No new matter has been added. Accordingly, claims 2-3, 5-6, 8-9, 11-12, 14-15, 17-18 and 23-25 remain pending in the application. Reconsideration is respectfully requested in view of the amendments to the claims and the following remarks.

I. The § 101 Rejections

Claims 14-15, 18, 25 and 28 were rejected under 35 U.S.C. § 101 as not being directed to statutory subject matter.

Applicant has amended claim 25 to recite that the program instructions are tangibly stored on the computer readable medium. See MPEP 2106, "[w]hen functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases". Applicant respectfully submits that claims 14-15, 18, 25 and 28 are directed to statutory subject matter.

II. The § 103 Rejections

Claims 2-3, 5-6, 8-9, 11-12, 14-15, 17-18 and 23-28 were rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 6,185,699 ("Haderle") in view of U.S. Patent 6,275,832 ("Watts") and U.S. Patent No. 5,029,169 ("Smyk").

Applicant respectfully traverses the rejections.

Claim 23, as amended, recites a method for recovering retained locks in a shared system environment having a plurality of operating systems sharing processor resources. In particular, the method includes determining that a first database management system associated with a first

operating system has failed, and retaining within a second operating system a plurality of data locks held by the first database management system in response to the failure. The plurality of data locks are held by the second operating system to prevent other database management systems in the shared system environment from accessing inconsistent data associated with each of the plurality of data locks.

A. *Haderle Fails To Disclose Retaining Within a Second Operating System a Plurality of Data Locks Held by the First Database Management System In Response to The Failure As Recited In Claim 23*

Haderle discloses a method and apparatus that enables full restart and recovery of a DBMS to be completed concurrent to the processing of new transactions requiring access to the database (see Abstract; col. 12, ll. 22-33). According to Haderle's system, when a failure occurs, a restart recovery mechanism 108 is invoked (col. 5, ll. 53-57). Haderle, however, fails to disclose that the restart recovery mechanism 108 includes retaining a plurality of data locks held by a DBMS that has failed within a second operating system, as recited in claim 23 (emphasis added).

B. *Watts Fails To Disclose Retaining Within a Second Operating System a Plurality of Data Locks Held by the First Database Management System In Response to The Failure As Recited In Claim 23*

Watts discloses a technique for undoing a transaction that changes data in a database (see Abstract). In particular, Watts discloses associating a lock, transaction identification number (ID), transaction operation bit, and a data unit with an operation, and undoing the operation using the associated lock, transaction identification number (ID), transaction operation bit, and a data unit (col. 2, ll. 14-20; FIG. 4). In one aspect, Watts discloses performing backward recovery

from a system failure in which transaction IDs are unavailable (col. 7, l. 65 – col. 8, l. 3). In this scenario, Watts discloses interrogating retained locks held by the restarting system (col. 8, ll. 3-6).

While Watts discloses interrogating retained locks held by the restarting system, Watts, nevertheless, fails to disclose that the restarting system is a different system in which the system failure occurred. Moreover, Watts discloses a system that includes only a single operating system (see FIG. 1). Accordingly, Watts fails to disclose retaining a plurality of data locks held by a DBMS that has failed within a second operating system, as recited in claim 23.

C. *Smyk Fails To Disclose Retaining Within a Second Operating System a Plurality of Data Locks Held by the First Database Management System In Response to The Failure As Recited In Claim 23*

Smyk discloses a data processign system in which each software process monitors every other software process for failures (see Abstract). Smyk, however, fails to disclose retaining a plurality of data locks held by a DBMS that has failed within a second operating system. As with Watts, Smyk discloses a system for initiating failure recovery that includes only a single operating system (operating system 21, of FIG. 1).

D. *The claim has limitations not taught by either reference*

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Haderle, Watts, and Smyk (either alone or in combination) fail to disclose retaining a plurality of data locks held by a DBMS that has failed within a second operating system. Consequently, the combination of Haderle, Watts, and Smyk cannot render claim 23 obvious.

E. *Other Independent Claims*

Claims 24 and 25 incorporate limitations similar to those of claim 23. Claims 24 and 25 (and the claims that depend therefrom) are also allowable over the combination of Haderle, Watts, and Smyk for reasons corresponding to those set forth with respect to claim 23.

F. *Dependent Claims 2, 8, 14*

Dependent claims 2, 8 and 14 each recite that the predefined plurality of processor resources does not include a processor resource utilized to enable the first database management system to accept new work.

Applicant respectfully submits that Haderle teaches away from non-utilization of a processor resource that enables the first database management system to accept new work during restart and recovery of nonconsistent data, as required by dependent claims 2, 8, and 14. That is, Haderle discloses that an amount of restart recovery processing may be postponed until after the DBMS has begun accepting new work requests (see Abstract; col. 2, ll. 40-42). For this reason, in addition to the reasons discussed above, Applicant respectfully submits that dependent claims 2, 8, and 14 are allowable over Haderle, Watts, and Smyk.

Applicant submits that claims 2-3, 5-6, 8-9, 11-12, 14-15, 17-18 and 23-25 are allowable over the references cited above. Should any unresolved issues remain, the Examiner is invited to call the undersigned at the telephone number indicated below.

Respectfully submitted,

SAWYER LAW GROUP LLP

May 26, 2006
Date

Kelvin M. Vivian
Attorney for Applicant(s)
Reg. No. 53,727
(650) 475-1448